

From glowbugs@theporch.com Fri Oct 25 11:24:26 1996
Return-Path: <glowbugs@theporch.com>
Received: from uro (localhost.theporch.com [127.0.0.1]) by uro.theporch.com
(8.8.2/AUX-3.1.1) with SMTP id LAA16897; Fri, 25 Oct 1996 11:12:11 -0500 (CDT)
Date: Fri, 25 Oct 1996 11:12:11 -0500 (CDT)
Message-Id: <199610251612.LAA16897@uro.theporch.com>
Errors-To: conard@tntech.campus.mci.net
Reply-To: glowbugs@theporch.com
Originator: glowbugs@theporch.com
Sender: glowbugs@theporch.com
Precedence: bulk
From: glowbugs@theporch.com
To: Multiple recipients of list <glowbugs@theporch.com>
Subject: GLOWBUGS digest 331
X-Listprocessor-Version: 6.0c -- ListProcessor by Anastasios Kotsikonas
X-Comment: Please send list server requests to listproc@theporch.com
Status: 0

GLOWBUGS Digest 331

Topics covered in this issue include:

- 1) An interesting linear
by jefffd@coriolis.com (Jeff Duntemann)
- 2) Re: An interesting linear
by Bob Roehrig <broehrig@admin.aurora.edu>
- 3) Re: Homebrew Mailing Lists
by rdkeys@csemail.cropsci.ncsu.edu
- 4) Glowbugs admin ... please read.
by Conard Murray <conard@tntech.campus.mci.net>
- 5) Tube Manuals (was Re: Where is it?? (fwd) (6T9er))
by mjsilva@ix.netcom.com (michael silva)
- 6) Glowbugs Topic Statement
by Conard Murray <conard@tntech.campus.mci.net>
- 7) noise limiter help
by Bob Roehrig <broehrig@admin.aurora.edu>
- 8) Re: Glowbugs admin ... please read.
by "Lawrence R. Ware" <lrware@pipeline.com>
- 9) Re: Where is it?? (fwd) (6T9er)
by "Brian Carling" <bry@mnsinc.com>
- 10) Re: Recieving tubes for transmitting?
by Robert Paschal <r-paschal@worldnet.att.net>
- 11) Re: Recieving tubes for transmitting?
by "Robert M. Bratcher Jr." <bratcher@worldnet.att.net>
- 12) Re: Homebrew Mailing Lists
by "Robert M. Bratcher Jr." <bratcher@worldnet.att.net>
- 13) still looking
by sigcom@juno.com (Stephen M Smith)

- 14) TUBE BANK(s) Idea!
by "Brian Carling" <bry@mnsinc.com>
- 15) Re: noise limiter help
by Roy Morgan <morgan@speckle.ncsl.nist.gov>
- 16) Re: Glowbugs admin ... please read.
by Jake Hellbach <kk5hy@accesscom.net>
- 17) Re: Tube Manuals (was Re: Where is it?? (fwd) (6T9er))
by jlevro@shore.net (John Levreault)
- 18) RE: Recieving tubes for transmitting?
by "Paul Bocci-CPB007" <Paul_Bocci-CPB007@email.mot.com>
- 19) Regen Plans
by jkh@lexis-nexis.com (John Heck)
- 20) Re: Tube Manuals
by linscot@is.rice.edu (Steve Linscott)
- 21) Re: Regen Plans
by rdkeys@csemail.cropsci.ncsu.edu

Date: Thu, 24 Oct 1996 09:14:50 -0700
From: jeffd@coriolis.com (Jeff Duntemann)
To: glowbugs@theporch.com
Subject: An interesting linear
Message-ID: <1.5.4.32.19961024091038.0095b8d4@ntserver.coriolis.com>

Hi gang--

While flipping QSTs last night looking for something else, I stumbled across an article by Doug DeMaw and Anthony Dorbuck on building a 160-meter linear amp *without* transmitting variables. It's really novel, though I have some reservations about it.

Details: DeMaw put four 807s in parallel, driving the grids through a 1:4 broadband transformer, with an 8W 220 ohm noninductive resistance (built up of smaller units) at the grids to set input a low input impedance in the cause of reducing the need for neutralization. Input to the 807s is 350W. (Doesn't this seem like a lot for those tubes in class AB2 service? That's just under 90W per tube...) The kicker is that he redesigned the output pi network so that it uses a *fixed* capacitance consisting of five transmitting 1000 uuf 2500v mica caps--and a vari-coupler to tune the output! He set up a system of two short lengths of large diameter Miniductor (2" on one and 2 1/2" on the other) so that one can rotate perpendicular to the axis of the other, just like they used to do in olde tyme receivers. The other innovation is a one-plate 750 uuf fixed capacitor consisting of a 4" X 6" metal plate and the chassis, with a sheet of 10 mil teflon between them. The RF current at this point was so high that it fried even transmitting micas. So the teflon was the only thing that worked.

A bonus in the article is an unusually detailed development of the calculations required to work out the network. This means that if you want to migrate the design to 80m you have a ghost of a chance of figuring the network. (Alas, the higher the frequency, the less tenable the varicoupler pi net design.) I would guess that you could put some wire around short lengths of PVC pipe and finesse the Miniductor part of it. The transmitting micas are still a problem, but I've cornered quite a few over the years. Certainly they're commoner than big transmitting variables.

The downside is that this isn't an AM amp, as far as I can tell. DeMaw was driving it with a 5W sold state SSB exciter. I keep thinking AM would toast the finals at 90W input. But I bet you could re-bias it for CW.

The article is TRANSMITTING VARIABLES--WHO NEEDS 'EM? QST, February 1975, p. 37.

--73--

--Jeff Duntemann KG7JF
Scottsdale, Arizona

Date: Thu, 24 Oct 1996 11:47:02 -0500 (CDT)
From: Bob Roehrig <broehrig@admin.aurora.edu>
To: Jeff Duntemann <jeffd@coriolis.com>
Cc: Multiple recipients of list <glowbugs@theporch.com>
Subject: Re: An interesting linear
Message-ID: <Pine.ULT.3.95.961024114155.23129C-1000000@admin.aurora.edu>

On Thu, 24 Oct 1996, Jeff Duntemann wrote:

> While flipping QSTs last night looking for something else, I stumbled across
> an article by Doug DeMaw and Anthony Dorbuck on building a 160-meter linear
> amp *without* transmitting variables. It's really novel, though I have some
> reservations about it.

>

> Details: DeMaw put four 807s in parallel, driving the grids through a 1:4
> broadband transformer, with an 8W 220 ohm noninductive resistance (built up
> of smaller units) at the grids to set input a low input impedance in the
> cause of reducing the need for neutralization.

That's basically what I did in my amp (to be driven by my C.E. 20-A).
Works great!

> Input to the 807s is 350W.
> (Doesn't this seem like a lot for those tubes in class AB2 service?

> That's just under 90W per tube...)

Something wrong there. I have something just over 600V on the plates and I get about 100W output.

Were I to build another similar amp, I would forget the PI-net output and go with simple link coupling. Gonna feed a 50 ohm antenna anyway.

E-mail broehrig@admin.aurora.edu 73 de Bob, K9EUI
CIS: Data / Telecom Aurora University, Aurora, IL

Date: Thu, 24 Oct 1996 13:46:48 -0400 (EDT)
From: rdkeys@csemail.cropsci.ncsu.edu
To: barnes29@chelsea.ios.com
Cc: rdkeys@csemail.cropsci.ncsu.edu (), glowbugs@theporch.com
Subject: Re: Homebrew Mailing Lists
Message-ID: <9610241746.AA104655@csemail.cropsci.ncsu.edu>

>
> Gents--
>
> Although Glowbugs has cornered the market on tube-type homebrewing,
> I have often wondered if there is a solid-state (or hybrid) counterpart
> mailing list. Does anyone know of any other homebrew mailing lists that are
> not necessarily restricted to QRP power levels?
>
> Jim N4YOK

There is a ham-homebrew list out of UCSD.edu.

Send a one liner to listserver@ucsd.edu with the line:

ADD yourid@where.ever.youare ham-homebrew

I don't know much about it, but subscribed to it one time for a bit.
Not much traffic.

Much prefer glowinbottlies, ere.....

Bob/NA4G

Date: Thu, 24 Oct 1996 14:30:29 -0500
From: Conard Murray <conard@tntech.campus.mci.net>
To: glowbugs@theporch.com
Subject: Glowbugs admin ... please read.
Message-ID: <1.5.4.32.19961024193029.006817d4@tntech.campus.mci.net>

Hello to all 250 plus readers of the this list!

I am trying to do some work on the list and I would appreciate if you would take time to send me a message telling me your e-mail address is still valid and you are reading mail sent there.

I noticed some of you are getting the list feed at more than one address. This is NOT a problem, but I need to know if you still want all the addresses on the list. I am doing this because we are using donated server space and I want to maintain the list in an efficient manner. Also, bad addresses have the annoying tendency of generating gobs of error messages all of a sudden.

Believe it or not, this e-mail system is not infallible either. About every third day I get an error message with about 50 or so addresses in it saying that the nameserver or user is unknown and the mail was undeliverable. Many times, my own address is on that list, so if you miss a posting from the group it was probably lost in the mail.

I also notice that most of you are just lurking out there. If you are not too shy, drop the group a short note introducing yourself and what you like to work on or what you have built or want to build. Remember, you are the list and it becomes what you make it.

Thanks for the help and best of 73,
de Conard, ws4s
listowner, glowbugs

Conard Murray WS4S NNNOUTN conard@tntech.campus.mci.net
217 Dyer Avenue BA/GB net 1802.5/3579.5/7050 KHz
Cookeville, Tn 38501
615-526-4093

- LICENSED ONLY TO EXTENT INDICATED ON CARTON -

Date: Thu, 24 Oct 1996 13:24:00 -0700
From: mjsilva@ix.netcom.com (michael silva)
To: glowbugs@theporch.com
Subject: Tube Manuals (was Re: Where is it?? (fwd) (6T9er))
Message-ID: <199610242024.NAA13794@dfw-ix2.ix.netcom.com>

> On Tue, 22 Oct 1996 KA9EGW@aol.com wrote:

>> I know the 6T9 is just a 6C4 and some pentode in a single envelope; might not

>> a 6C4 and 5763 work as well?

>

> Yes. Funny you should mention that.

>

> My sole tube manual is too old for the 6T9 so I can't speculate

Perhaps the best readily-available tube data manual is the 1973 GE Essential Characteristics manual reprinted by AES. Seems as though GE rarely if ever met a tube it didn't want to manufacture <g>. In one book you get just about everything from the '01A forward. I'd give out their number but I've lost my AES catalog (luckily the new ones are being sent out this week!).

AES also sells a more "traditional" manual reprint, the 1959 RCA Receiving Tube Manual, as well as a 1962 Transmitting Tube Manual reprint.

73,
Mike, KK6GM

Date: Thu, 24 Oct 1996 16:40:32 -0500
From: Conard Murray <conard@tnitech.campus.mci.net>
To: glowbugs@theporch.com
Subject: Glowbugs Topic Statement
Message-ID: <1.5.4.32.19961024214032.006c6700@tnitech.campus.mci.net>

Greeting Globuggers everywhere!

There have been a few comments made recently noting that the topics of the GB list have not been stated recently. I agree. Therefore, the topics of discussion on this list are, but are not necessarily limited to,

- 1) Building new equipment (homebrewing) with vacuum tubes.
- 2) Discussions on vacuum tube circuitry.
- 3) Discussions on proper building techniques.
- 4) Wants/for sales of tubes, components or literature.
- 5) Reports of building accomplishments and other war stories.
- 6) Discussion of proper operating procedures and net reports.

Note that I did not limit the list to these topics. Use your own disgression as to a posting. Noone has been deleted off the list yet for bad behaviour.

Please remember to post a short introductory message to the group and don't forget the GB/BA nets.

73 de Conard ws4s

Conard Murray WS4S NNN0UTN conard@tntech.campus.mci.net
217 Dyer Avenue BA/GB net 1802.5/3579.5/7050 KHz
Cookeville, Tn 38501
615-526-4093

- LICENSED ONLY TO EXTENT INDICATED ON CARTON -

Date: Thu, 24 Oct 1996 22:06:39 -0500 (CDT)
From: Bob Roehrig <broehrig@admin.aurora.edu>
To: glowbugs <glowbugs@theporch.com>
Subject: noise limiter help
Message-ID: <Pine.ULT.3.95.961024215904.21522D-1000000@admin.aurora.edu>

OK, Conard says this list is a little dead, so I'll see if I can stir up a little discussion.

I am looking for your favorite noise limiter (or a simple blanker) circuit. Most of the limiters I've used/seen distort the audio pretty badly. Supposedly, the type that works at the IF frequency, rather than in the audio path, has less distortion. I tried the one in the ARRL handbook, and I couldn't get it to work (possibly because it's threshold is fixed right around .2V and my signal level was not there).

The old CQ sideband handbook says the circuit in the NC-303 is good but it was obvious the author of the comments didn't try it himself.

I want a decent circuit that will work on all modes, not just AM. I am after something that can perhaps be constructed with silicon or Germanium diodes so it can easily be added into various older BA receivers that don't have such a device, on a small perf board so the basic receiver doesn't really have to be modified much.

If I get enough comments, I'll summarize and post.

Thanks

E-mail broehrig@admin.aurora.edu 73 de Bob, K9EUI
CIS: Data / Telecom Aurora University, Aurora, IL

Date: Thu, 24 Oct 1996 20:58:27 +0000
From: "Lawrence R. Ware" <lrware@pipeline.com>
To: glowbugs@theporch.com
Cc: conard@tntech.campus.mci.net
Subject: Re: Glowbugs admin ... please read.
Message-ID: <1.5.4.16.19961024205827.2abfbc98@pop.pipeline.com>

At 14:36 10/24/1996 -0500, you wrote:
>Hello to all 250 plus readers of the this list!
Hi Conard, lrware@pipeline.com is my only active address.

>I also notice that most of you are just lurking out there. If you are not
too shy, drop the group a short note introducing yourself
<snip>

OK, for those of you who don't know me from "boatanchors" or "vss"
my name is Larry Ware. I work as a R&D engineer for a telecommunications
company. I collect BA mil type receivers, National NC-100's
mainly, including an RBL-3, an RCP, and a NC-120. Big, black and
in the hundredpound class! I am also an avid admirer/user and collector
of HP and Tek test equipment. (I won't bore you with the list. :-)

I'm still trying to learn morse, because I promised boatanchor bob
I'd try... hard when your tone deaf... :-)

My homebrew novice transmitter is mostly complete, a strange
combination of solid-state osc. mosfet drivers and constantly
changing sweep tube final. :-) Still looking for a stable 80
watts or so, while working my way through a bunch of old TV
tubes. :-)

Darn thing started as a back of an envelope design, has become
something to putter with.

-Larry Ware

Crazy Larry's Home for Wayward Test Equipment & Old Radios (tm)
Let your equipment retire in sunny central Florida.
Intensive Care, Private Bench Space, Frequent Use,
Factory trained HP, Tek. & Fluke Surgeon on staff.
Good Home Guaranteed or double your junk back!
lrware@pipeline.com, - Orlando, Florida -

Date: Thu, 24 Oct 1996 15:58:21 +0000
From: "Brian Carling" <bry@mnsinc.com>
To: glowbugs@theporch.com
Subject: Re: Where is it?? (fwd) (6T9er)
Message-ID: <199610242255.SAA03096@user2.mnsinc.com>

HEY! It's a reply from AF4K!
On 24 Oct 96, toyboat@freenet.edmonton.ab.c wrote:

> I have a photocopied QST MOPA transmitter article, using
> a 6C4 Pierce oscillator and 5763 amplifier.
>
> (QST, October 1968, Page 22, By Don Mix, W1TS)

Cool Shane. I have to keep an eye out for those 1960s QST magazines
at the hamfests!

Bry
73 from Radio AF4K / G3XLQ in Gaithersburg, MD USA
bry@mnsinc.com
*** See the great ham radio resources at:
<http://www.mnsinc.com/bry/>

Date: Fri, 25 Oct 1996 03:42:59 +0000
From: Robert Paschal <r-paschal@worldnet.att.net>
To: rdkeys@csemail.cropsci.ncsu.edu
Cc: glowbugs@theporch.com
Subject: Re: Recieving tubes for transmitting?
Message-ID: <19961025034256.AAA20053@LOCALNAME>

At 02:37 PM 10/24/96 +0000, you wrote:
>>

>
>Does anyone have the QST index on-line? We might be able to get a good start
>that way. I understand it is on CDRom, or something like that. Anyone know
>anyone at ARRL that could run such a search through? If not, I will try
>to visit the stacks sometime this week or next, as time permits.

>
>Bob/NA4G

>
Bob, You might be interested in checking with an outfit called Radio Era
Archives. Supposedly they plan to put 80 years of QST on CD roms. See their
web page at <http://www.flash.net/~tsm/qst.htm>. As I recall they intend to
start with the more modern issues and publish them in five year groups for

the later ones. When they get to some of the older ones maybe 10 year groups or something like that. I have seen one posting on another list which, as I recall, reported that the first group may be available by Christmas.

USUAL DISCLAIMER - I have no connection with this company and no first hand information about them.

73 Bob AA0MC

Date: Thu, 24 Oct 1996 22:54:57 -0500
From: "Robert M. Bratcher Jr." <bratcher@worldnet.att.net>
To: rdkeys@csemail.cropsci.ncsu.edu
Cc: glowbugs@theporch.com
Subject: Re: Recieving tubes for transmitting?
Message-ID: <1.5.4.32.19961025035457.0068fc04@postoffice.worldnet.att.net>

At 02:37 PM 10/24/96 +0000, you wrote:

>>
>> You wrote:
>> "Maybe we should get together an annotated bibliography of Sutter's
>> QSL series."
>>
>> I'm all for it. I'd also like to be able to order reprints since the nearest
>> library of old QSTs that I know about is about 65 miles away around the
>> infamous Beltway!
>
>OK, my issues are incomplete, but I have copied a few of them for my working
>papers.
>
>Does anyone have the QST index on-line? We might be able to get a good start
>that way. I understand it is on CDRom, or something like that. Anyone know
>anyone at ARRL that could run such a search through? If not, I will try
>to visit the stacks sometime this week or next, as time permits.
>
>Bob/NA4G
>
>

If this is what I'm thinking of then I've got the original QSL-40 & QSL-60 articles from my growing QST collection.
Are there any other QSL articles that I don't know about?

Robert M. Bratcher Jr.
E-mail to:
bratcher@worldnet.att.net

Record collector, 8mm, super 8, 16 and 35mm Film collector.
I like old radio's too.
Collins, Hallicrafters, National & Hammurland are my Favorites!

Date: Thu, 24 Oct 1996 22:56:52 -0500
From: "Robert M. Bratcher Jr." <bratcher@worldnet.att.net>
To: rdkeys@csemail.cropsci.ncsu.edu
Cc: glowbugs@theporch.com
Subject: Re: Homebrew Mailing Lists
Message-ID: <1.5.4.32.19961025035652.0068e89c@postoffice.worldnet.att.net>

At 05:21 PM 10/24/96 +0000, you wrote:

>There is a ham-homebrew list out of UCSD.edu.
>
>Send a one liner to listserver@ucsd.edu with the line:
>
> ADD yourid@where.ever.youare ham-homebrew
>
>I don't know much about it, but subscribed to it one time for a bit.
>Not much traffic.
>
>Much prefer glowinbottlies, ere.....
>
>Bob/NA4G
>
>

I think that list duplicates rec.radio.amateur.homebrew but I'm not sure.

Robert M. Bratcher Jr.
E-mail to:
bratcher@worldnet.att.net
Record collector, 8mm, super 8, 16 and 35mm Film collector.
I like old radio's too.
Collins, Hallicrafters, National & Hammurland are my Favorites!

Date: Fri, 25 Oct 1996 01:24:59 EDT
From: sigcom@juno.com (Stephen M Smith)
To: glowbugs@theporch.com
Subject: still looking
Message-ID: <19961024.201620.8295.4.sigcom@juno.com>

Gang,

I'm still looking for the original article on which my 6L6 rig is based entitled "The Scrounger". I had thought it was in Popular Electronics but one gentleman looked in his archives and couldn't find it. It may have been Electronics Illustrated or Radio-Electronics all circa 1967. Any help would be appreciated.

Thanks and 73.....Steve, WB6TNL

Date: Fri, 25 Oct 1996 05:39:20 +0000
From: "Brian Carling" <bry@mnsinc.com>
To: glowbugs@theporch.com
Subject: TUBE BANK(s) Idea!
Message-ID: <199610251236.IAA11440@user2.mnsinc.com>

Greetings all!

I have an idea whose time has come.

Are there some retirees who love tubes, or a independently wealthy person that would like to take this on?

The idea is for a "tube bank."

Where did I get the idea?

Well, our local radio store, Maryland Amateur Radio in Laurel recently moved to much smaller premises. In their old place they operated a FREE TUBE bank!

Can you believe it?

I live a long way from there and didn't get involved with it much. (I would NOW if I could!) Back then I was too busy for GB/BA activities too.

People deposited tubes they no longer wanted to keep, and others could walk in and get a free tube any time they needed it!

I thought that was a GREAT idea.

Why couldn't WE do the same thing? Unfortunately we would still have to pay shipping, but if someone had the space it has great potential for promoting the use of tubes.

My idea is that for the first year, you would take them on the basis that someone would have to donate two tubes for every ONE tube they withdrew. That would help build up the stocks etc.

Such a tube bank could be instituted all over the country like a library in several different population centers.

This would help to ensure that tube collections did not get thrown away or stashed in the basements of hams that will not ever use them.

WHAT DO YOU THINK, GUYS?????????????

Could some of US do this?

Let us know what you think!

"Heck with the whales, SAVE THE TUBES!"

(OK, JUST kidding!)

73 from Radio AF4K / G3XLQ in Gaithersburg, MD USA

bry@mnsinc.com

*** See the great ham radio resources at:

<http://www.mnsinc.com/bry/>

Date: Fri, 25 Oct 1996 09:19:02 -0400
From: Roy Morgan <morgan@speckle.ncsl.nist.gov>
To: glowbugs@theporch.com
Subject: Re: noise limiter help
Message-ID: <9610251319.AA27254@speckle.ncsl.nist.gov>

At 10:06 PM 10/24/96 -0500, you wrote:

>

>

>I am looking for your favorite noise limiter (or a simple blanker)
>circuit.

I've got the design of one I put into an ARC-5 Receiver in the 60's - it uses a 6AL5 and has a variable threshold. My guess is that you might be able to make the circuit of germanium diodes inside a little socket extender so you could plug it into the last IF of your set.

I remember that it worked pretty well, but didn't turn the ARC-5 into a 51J-3!

PS: I spent last night fiddling with the RAL receiver on the glow bugs frequencies. I've got a BC-221 frequency meter for calibration and am running an inverted L on 160 and 80. The antenna wouldn't load on 80 (no

surprise!), so althought I heard Bob Keys in there on 7050 at 10 pm EST, I couldn't get out.

I had located a colorus rockus crystal and installed it into half of a 5U4 tube base. It fits fine into the front crystal socket of the Valiant (a tube socket behind a removable fake knob). A recent addition to the rock collection includes one on 7050, so I'm all set for rock-bound ether poking on the ole QRG. Now, if we could only get W1AW to go to bed earlier ...

VALIANT owners: my oscillator runs on with the colorus rockus in there, and also slightly with the 7050 rock in the circuit - is this a common problem? - I haven't investigated, but I suspect a tweak on the oscillator bias will cure it. No such trouble with the VFO switched in.

-- Roy Morgan/Building 820, Room 562/Gaithersburg MD 20899
(National Institute of Standards and Technology, formerly NBS)
301-975-3254 Fax: 301-948-6213 morgan@speckle.ncsl.nist.gov --

Date: Fri, 25 Oct 96 08:30 CDT
From: Jake Hellbach <kk5hy@accesscom.net>
To: conard@tntech.campus.mci.net
Subject: Re: Glowbugs admin ... please read.
Message-ID: <2.2.16.19961025082554.46f72698@accesscom.net>

Hi Conrad and everyone on the list,
My name is Jake and my current email is kk5hy@accesscom.net.
I guess I am one of the lurkers but love old radio gear and enjoy reading all the messages I get.
I've rebuilt a Superpro SP-400 and use it on 75 A.M. with a Knight T-150 tx.

73' Jake KK5HY

Email via: kk5hy@accesscom.net
AMI #832
Check out the Westside ARC Web page at:
<http://www.accesscom.net/~kk5hy>
Updated with Boatanchor links!!!!

Date: Fri, 25 Oct 1996 09:59:44 -0400 (EDT)
From: jlevvio@shore.net (John Levreault)
To: glowbugs@theporch.com
Subject: Re: Tube Manuals (was Re: Where is it?? (fwd) (6T9er))
Message-ID: <199610251359.JAA21929@relay1.shore.net>

>> On Tue, 22 Oct 1996 KA9EGW@aol.com wrote:
>>> I know the 6T9 is just a 6C4 and some pentode in a single
>envelope;might not
>>> a 6C4 and 5763 work as well?
>>
>> Yes. Funny you should mention that.
>>
>> My sole tube manual is too old for the 6T9 so I can't speculate
>
>Perhaps the best readily-available tube data manual is the 1973 GE
>Essential Characteristics manual reprinted by AES. Seems as though GE
>rarely if ever met a tube it didn't want to manufacture <g>. In one
>book you get just about everything from the '01A forward. I'd give out
>their number but I've lost my AES catalog (luckily the new ones are
>being sent out this week!).
>
>AES also sells a more "traditional" manual reprint, the 1959 RCA
>Receiving Tube Manual, as well as a 1962 Transmitting Tube Manual
>reprint.
>
>73,
>Mike, KK6GM
>
>

Antique Electronic Supply
6221 South Maple St.
Tempe, AZ 85283
(602)820-5411 ph
(602)820-4643 fax
(800)706-6789 fax for US and Canada

1997 catalog just came in this week. Great service. Highly recommended.

73 de NB1I
John Levreault

Date: Fri, 25 Oct 1996 9:28:40 -0500
From: "Paul Bocci-CPB007" <Paul_Bocci-CPB007@email.mot.com>
To: glowbugs@theporch.com
Subject: RE: Recieving tubes for transmitting?
Message-ID: <Macintosh */PRMD=MOT/ADMD=MOT/C=US/@MHS>

I checked through my collection of articles last night and found for Sutter articles from the "QSL" series. They are:

The QSL Forty -- Feb, 1938
The QSL Forty on 14 Mc. -- Jul, 1938
The Runt Sixty and the QSL Sixty -- Sep, 1939
The QSL Push-Pull -- Jun, 1940

The last one, I think, represents the ultimate - 100 Watts output from a pair of 6L6's!

73 es ZUT
Paul, K9NO

To: glowbugs@theporch.com@INTERNET
From: bratcher@worldnet.att.net@INTERNET on 25, Oct 1996, 2:31 AM
Subject: Re: Recieving tubes for transmitting?

At 02:37 PM 10/24/96 +0000, you wrote:

>>

>> You wrote:

>> "Maybe we should get together an annotated bibliography of Sutter's
>> QSL series."

>>

>> I'm all for it. I'd also like to be able to order reprints since the
nearest

>> library of old QSTs that I know about is about 65 miles away around the
>> infamous Beltway!

>

>OK, my issues are incomplete, but I have copied a few of them for my
working
>papers.

>

>Does anyone have the QST index on-line? We might be able to get a good
start

>that way. I understand it is on CDRom, or something like that. Anyone
know

>anyone at ARRL that could run such a search through? If not, I will try
>to visit the stacks sometime this week or next, as time permits.

>

>Bob/NA4G

>

>

If this is what I'm thinking of then I've got the original QSL-40 & QSL-60 articles from my growing QST collection.
Are there any other QSL articles that I don't know about?

Robert M. Bratcher Jr.

E-mail to:

bratcher@worldnet.att.net

Record collector, 8mm, super 8, 16 and 35mm Film collector.

I like old radio's too.

Collins, Hallicrafters, National & Hammurland are my Favorites!

Date: Fri, 25 Oct 96 10:31:55 EDT

From: jkh@lexis-nexis.com (John Heck)

To: glowbugs@theporch.com

Subject: Regen Plans

Message-ID: <9610251431.AA03220@beans.lexis-nexis.com>

For those who are searching for regen projects I might suggest looking in your older

tube manuals. I am looking in the circuit section of my RCA RC-16(1950) Receiving Tube Manual and find three interesting circuits numbered 16-5, 16-6, and 16-7. The first is a superregenerative receiver with it's own power supply and using a 6C4 for a detector. It has a two tube audio stage driving a speaker. With the 6X4 power supply

it's a four tuber. The next page has a ac-operated regen, for those who have a power

supply, employing a 6SK7 in both an RF apm stage and as a detector. It also has an audio section with a voltage amp amd a 6K6 power amp stage driving a speaker. The third one is a little battery set with a 1U4 RF amp, a 1U4 detector, and a 3V4 power

amp also driving a speaker. It wants 90 volts B+ and 1.4 volts to the filiments.

These circuits are claimed to be well though out and conservative designs(at least RCA

thought so) but RCA thoughtfully leaves the construction details to the reader.

They

look sound to me and perhaps have enough clues to the coil winding requirements to be build-able without too much trouble. Might be worth looking at.

Are there other examples in tube manuals you have? Or are these designs really pretty
ho-hum?

Regards,
John Heck, KC8ETS
Dayton, Ohio
jkh@lexis-nexis.com

Date: Fri, 25 Oct 1996 09:41:49 -0500 (CDT)
From: linscot@is.rice.edu (Steve Linscott)
To: glowbugs@theporch.com
Subject: Re: Tube Manuals
Message-ID: <v01540b01ae96362026b9@[128.42.14.170]>

I have the RCA Electron Tube Handbook HB-3, which is six small loose-leaf volumes covering the late 50's - early 60's. The volumes are:

Receiving, Part 1
Receiving, Part 2
Receiving, Industrial
Transmitting
General, Cathode Ray, Storage
Miscellaneous, Thyatron, Ignitron

These could use a good home with somebody who would appreciate them.
Proposals will be accepted.

73 de W5EGP

- Steve -

* Steve Linscott Divisional Consultant Natural Sciences *
* Rice University 6100 South Main Street Houston, Texas 77005-1892 *
* Phone: (713) 527-4985 FAX: (713) 527-6099 Email: linscot@rice.edu *

Date: Fri, 25 Oct 1996 12:14:05 -0400 (EDT)
From: rdkeys@csemail.cropsci.ncsu.edu
To: jkh@lexis-nexis.com
Cc: rdkeys@csemail.cropsci.ncsu.edu (), glowbugs@theporch.com
Subject: Re: Regen Plans

Message-ID: <9610251614.AA105689@csemail.cropsci.ncsu.edu>

> tube manuals.....RCA RC-16(1950) Receiving Tube Manual..... etc.

> These circuits are claimed to be well thought out and conservative designs
> (at least RCA thought so) but RCA thoughtfully leaves the construction
> details to the reader. They look sound to me and perhaps have enough clues
> to the coil winding requirements to be build-able without too much trouble.
> Might be worth looking at.

>

> Are there other examples in tube manuals you have? Or are these designs
> really pretty ho-hum?

>

> John Heck, KC8ETS

John, et al..... let us remember that RCA/RMCA was the PREMIER regenerative receiver designer from the beginnings of radio (as American Marconi in the WWI era) up through the late 60's (as in commercial shipboard regenerative receivers for mf use). If RCA designed it, it is usually quite good. All of the RCA/RMCA regenerative receivers I have played with (marine and military) have been very good at what they do, which is receive CW well. The classic military incantation of the regen receiver is in the Army BC-131 (USCG also) receiver which was the last of the line of the WWI Navy SE series receivers. Commercially they were known as the IP-500 and IP-501 series receivers. Although RCA did not do the original design work on these (Hazeltine in the Navy radio research lab at the Washington Navy yard did) they marketed the design along with their commercial shipboard gear and improved it. Their best next regen receiver was the AR-1496 receiver of the late 20's. This is a classic 4 tube lineup for HF use up to about 24 mhz or thereabouts. It was used in commercial HF systems during that period, in all services. The last military regen receiver of any merit was the RAK/RAL pair designed by RCA, again, in the late 30's. At about the same time, the commercial regenerative receivers culminated in the AR-8510 (I think that was the number) designed by RCA and the Mackay designed 128 series receivers. Both of these were used until the 70's aboard ship. Also the AR-8510 was actively manufactured through the middle 60's (mine is a 1964 date). That the basic designs are so long-lived is due to their being very robust designs that work well under harsh conditions. Only when synthesized gear came along in the late 70's, were the vacuum tube regens outclassed, and then only barely by performance, but plenty by bells and whistles and fancy digital readouts, stability, resettability, etc, the convenience factors.

A student of radio design could do well to study the progression of these commercial and military designs. They put almost all the ham based designs to shame. But, there have been some very good ham designs also. The original work is John Reinartz' 1922 classic spiderweb coil design. That started amateurs thinking about GOOD receivers. Then Boyd Phelps' low-loss designs of the following year or so started amateurs on the path to making

good RF insulated receivers --- even single tubers --- with very good performance and selectivity. Later, the late 1928 and 1929 QST designs from the ARRL lab, under Ross Hull's direction set the requirements for sensitivity, selectivity and non-radiating design. George Grammer put out several articles in the mid 30's but they were basically on how to make a very simple standby or code learning receiver. Fred Sutter's 1939 or so article on ``Selectivity with the 2-tube regenerative receiver'' showed how well a simple receiver could perform on a 12 inch antenna. After that point in time, it seems that most folks generally forgot how to design a good regenerative receiver. A few articles were published on ``rethinking'' old trusty regen designs, but not many. When the 60's rolled around, the articles were relegated to the backwaters of CQ and 73 and Popular Electronics. The only good articles after that time were a few by Bill Orr, who did some very fine historically accurate recreations in CQ about 1980, if my memory is correct. They are classics.

If I get some time, I will try to mull through my reprints and put together a general regen receiver annotated bibliography. I am up to the gills till the end of the month or so, chasing grants, so I will not have time until first week or so in November.

73/ZUT DE NA4G/Bob UP

End of GLOWBUGS Digest 331
